PTO/SB/05 (03-01)

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## UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No.

First Inventor

Atsushi TAI

Title

PROTECTIVE IMPLEMENT

| APPLICATION ELEMENTS  S. e. MPEP chapter 600 concerning utility patent application contents.  1. Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)  Applicant claims small entity status. See 37 CFR 1.27.  Assistant Commissioner for Patents Box Patent Application Washington, DC 20231  7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| S e MPEP chapter 600 concerning utility patent application contents.  Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)  Applicant claims small entity status. See 37 CFR 1.27.  See 37 CFR 1.27.  Box Patent Application Washington, DC 20231  7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)                                             |  |  |  |
| Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)  Applicant claims small entity status. See 37 CFR 1.27.  Total Server  Total Server |  |  |  |
| 1. (Submit an original and a duplicate for fee processing) Applicant claims small entity status. See 37 CFR 1.27. Constitution original and a duplicate for fee processing)  Applicant claims small entity status. See 37 CFR 1.27. Constitution original and a duplicate for fee processing)  8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)                                                                                                                      |  |  |  |
| Applicant claims small entity status.  See 37 CFR 1.27.  8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| (ii applicable, all necessary)                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| 3. Specification [Total Pages] a. Computer Readable Form (CRF)                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| - Descriptive title of the invention  - Cross Reference to Related Applications  b. Specification Sequence Listing on:                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
| - Closs Reference to Related Applications - Statement Regarding Fed sponsored R & D  i. CD-ROM or CD-R (2 copies); or                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |
| , - Reference to sequence listing, a table, ii. paper                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |
| or a computer program listing appendix - Background of the Invention  c. Statements verifying identity of above copies                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| - Brief Description of the Drawings (if filed) - Detailed Description - Detailed Description - Detailed Description - Accompanting APPLICATION PARTS - Accompanting APPLICATION PARTS - Accompanting APPLICATION PARTS                                                                                                                                                                                                                                                                                 |  |  |  |
| - Detailed Description  9 Assignment Papers (cover sheet & document(s))  - Claim(s)  - Claim(s)                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| - Claim(s) - Abstract of the Disclosure  37 CFR 3.73(b) Statement (when there is an assignee)  10. (when there is an assignee)                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure  Drawing(s) (35 U.S.C. 113) [ Total Sheets 14 ]  - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Brief Description of the Drawings (if filed) - Cooling of IDS                                                                                                                                                        |  |  |  |
| Scooth as Deplementary 1. Total Pages 112 Information Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |
| Statement (IDS)/PTO-1449 Citations                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |
| Newly executed (original or copy)  Copy from a prior application (37 CFR 1.63 (d))  Return Receipt Postcard (MPEP 503)                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
| Copy from a prior application (37 CFR 1.63 (d))  (for continuation/divisional with Box 18 completed)  Return Receipt Postcard (MPEP 503)  (Should be specifically itemized)                                                                                                                                                                                                                                                                                                                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR  Nonpublication Request under 35 U.S.C. 122                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |
| 1.63(d)(2) and 1.33(b). (b)(2)(B)(i). Applicant must attach form PTO/SB/35                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
| or its equivalent.  Application Data Sheet. See 37 CFR 1.76  17. Other:                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment or in an Application Data Sheet under 37 CFR 1.76:                                                                                                                                                                                                                                                                                                                   |  |  |  |
| Continuation Divisional Continuation-in-part (CIP) of prior application No.:                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
| Prior application information: Examiner: Group Art Unit:                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |
| For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.                                                                                                                                                                                                                        |  |  |  |
| 19. CORRESPONDENCE ADDRESS                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
| · · · · · · · · · · · · · · · · · · ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |
| Customer Number or Bar Code Label (Insert Gustomer Nonor Attubities cost bud flore) or Correspondence address below                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| Name Atsushi TAI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |
| #603, 3-2-2 Izuka,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |
| Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |
| City Kawaguchi-shi, State Saitama Zip Code 332-0023                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| Country Japan Telephone 03 5993 6816 Fax 03 5993 681                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
| Name (Print/Type) Atsushi Tai Pegistration No. (Atterney/Agent)                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| rame (Finite type) Registration No. (Attorney/Agent)                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
| Signature Atsushi Tai Date 12/25/2001  Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments                                                                                                                                                                                                                                                                                                       |  |  |  |

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PTO/SB/21 (08-00)
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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------|---------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                    |                             |                               | Application Numb                                  | oer         |                                                                                                                                                                                                                                                       |
| TRANSMITTAL<br>FORM                                                                                                                                                                                                                                                                |                             | Filing Date                   |                                                   |             |                                                                                                                                                                                                                                                       |
|                                                                                                                                                                                                                                                                                    |                             | First Named Inver             | ntor                                              | Atsushi Tai |                                                                                                                                                                                                                                                       |
| (to be used for all correspondence after initial filing)                                                                                                                                                                                                                           |                             | Group Art Unit                |                                                   |             |                                                                                                                                                                                                                                                       |
| ·                                                                                                                                                                                                                                                                                  |                             | Examiner Name                 |                                                   |             |                                                                                                                                                                                                                                                       |
| Total Number of Pag                                                                                                                                                                                                                                                                | ges in This Submission      | 1                             | Attorney Docket No                                | umber       |                                                                                                                                                                                                                                                       |
|                                                                                                                                                                                                                                                                                    |                             | ENCL                          | OSURES (cl                                        | heck a      | ll that apply)                                                                                                                                                                                                                                        |
| Fee Transmittal Form Fee Attached  Amendment / Reply After Final Affidavits/declara  Extension of Time Reque Express Abandonment F Information Disclosure S Certified Copy of Priority Document(s) Response to Missing Pa Incomplete Application Response to Miss under 37 CFR 1.5 | tatement  Rem               | Change Address Termina Reques | to Convert to a nal Application of Correspondence |             | After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please identify below): |
|                                                                                                                                                                                                                                                                                    | SIGNATURE O                 | F APPLI                       | CANT. ATTORNEY                                    | OR A        | GENT                                                                                                                                                                                                                                                  |
| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT  Firm or Individual name  Atsushi Tai  Signature  Atsushi Tai  Date  12/25/2001                                                                                                                                                         |                             |                               |                                                   |             |                                                                                                                                                                                                                                                       |
| CERTIFICATE OF MAILING                                                                                                                                                                                                                                                             |                             |                               |                                                   |             |                                                                                                                                                                                                                                                       |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date:                                           |                             |                               |                                                   |             |                                                                                                                                                                                                                                                       |
| Typed or printed name                                                                                                                                                                                                                                                              |                             |                               |                                                   |             |                                                                                                                                                                                                                                                       |
| Signature                                                                                                                                                                                                                                                                          |                             |                               |                                                   | Date        |                                                                                                                                                                                                                                                       |

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## **FEE TRANSMITTAL** for FY 2002

Patent fees are subject to annual revision.

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|-------------------------------|--------------------------------------------------------|
| Co                            | omplete if Known                                       |
| Application Number            |                                                        |
| Filing Date                   |                                                        |
| First Named Inventor          | Atsushi Tai                                            |
| Examiner Name                 |                                                        |
| Group Art Unit                |                                                        |
| Attorney Docket No.           |                                                        |

| METHOD OF PAYMENT FEE CALCULATION (continued)                                                                          |                                                                                          |          |  |
|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------|--|
| The Commissioner is hereby authorized to charge                                                                        | 3. ADDITIONAL FEES                                                                       |          |  |
| indicated fees and credit any overpayments to:  Deposit                                                                | Large Small                                                                              |          |  |
| Account<br>Number                                                                                                      | Entity Entity Fee Fee Fee Fee Fee Description                                            | Fee Paid |  |
| Deposit                                                                                                                | Fee Fee Fee Fee Fee Description Code (\$) Code (\$)                                      | Fee Faid |  |
| Account<br>Name                                                                                                        | 105 130 205 65 Surcharge - late filing fee or oath                                       |          |  |
| Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17                                                          | 127 50 227 25 Surcharge - late provisional filing fee or cover sheet                     | 130.00   |  |
| Applicant claims small entity status.                                                                                  | 139 130 139 130 Non-English specification                                                | 130.00   |  |
| See 37 CFR 1.27                                                                                                        | 147 2,520 147 2,520 For filing a request for ex parte reexamina                          | ation    |  |
| 2. Payment Enclosed: Check Credit card Money Order Other                                                               | 112 920* 112 920* Requesting publication of SIR prior to Examiner action                 |          |  |
| FEE CALCULATION                                                                                                        | 113 1,840* 113 1,840* Requesting publication of SIR after<br>Examiner action             | . —      |  |
| 1. BASIC FILING FEE                                                                                                    | 115 110 215 55 Extension for reply within first month                                    |          |  |
| I area Catity Cesall Entity                                                                                            | 116 400 216 200 Extension for reply within second month                                  |          |  |
| Fee Fee Fee Fee Description Code (\$) Code (\$) Fee Paid                                                               | 117 920 217 460 Extension for reply within third month                                   |          |  |
| 101 740 201 370 Utility filing fee 370,00                                                                              | 118 1,440 218 720 Extension for reply within fourth month                                | <u> </u> |  |
| 106 330 206 165 Design filing fee                                                                                      | 128 1,960 228 980 Extension for reply within fifth month                                 |          |  |
| 107 510 207 255 Plant filing fee                                                                                       | 119 320 219 160 Notice of Appeal                                                         |          |  |
| 108 740 208 370 Reissue filing fee                                                                                     | 120 320 220 160 Filing a brief in support of an appeal                                   |          |  |
| 114 160 214 80 Provisional filing fee                                                                                  | 121 280 221 140 Request for oral hearing                                                 |          |  |
|                                                                                                                        | 138 1,510 138 1,510 Petition to institute a public use proceedin                         | ,g       |  |
| subtotal (1) (\$) 370.00                                                                                               | 140 110 240 55 Petition to revive - unavoidable                                          |          |  |
| 2. EXTRA CLAIM FEES                                                                                                    | 141 1,280 241 640 Petition to revive - unintentional                                     |          |  |
| Extra Claims below Fee Paid                                                                                            | 142 1,280 242 640 Utility issue fee (or reissue)                                         |          |  |
| Total Claims20** = X =                                                                                                 | 143 460 243 230 Design issue fee                                                         | ·        |  |
| Independent - 3** = X = X                                                                                              | 144 620 244 310 Plant issue fee                                                          | $\vdash$ |  |
| Multiple Dependent =                                                                                                   | 122 130 122 130 Petitions to the Commissioner                                            | <u> </u> |  |
|                                                                                                                        | 123 50 123 50 Processing fee under 37 CFR 1.17(q)                                        | <u> </u> |  |
| Large Entity Small Entity Fee Fee Fee Fee Fee Description                                                              | 126 180 126 180 Submission of Information Disclosure Stm                                 | ıt       |  |
| Code (\$) Code (\$)<br>103 18 203 9 Claims in excess of 20                                                             | 581 40 581 40 Recording each patent assignment per property (times number of properties) |          |  |
| 102 84 202 42 Independent claims in excess of 3                                                                        | 146 740 246 370 Filing a submission after final rejection<br>(37 CFR § 1.129(a))         | l i      |  |
| 104 280 204 140 Multiple dependent claim, if not paid 109 84 209 42 ** Reissue independent claims over original patent | 149 740 249 370 For each additional invention to be examined (37 CFR § 1.129(b))         |          |  |
| 110 18 210 9 ** Reissue claims in excess of 20                                                                         | 179 740 279 370 Request for Continued Examination (RCE                                   | a        |  |
| and over original patent                                                                                               | 169 900 169 900 Request for expedited examination of a design application                |          |  |
| SUBTOTAL (2) (\$)                                                                                                      | Other fee (specify)                                                                      |          |  |
|                                                                                                                        | *Reduced by Basic Filing Fee Paid SURTOTAL (3) (\$)                                      | 130.00   |  |

| SUBMITTED BY      |             |                                      | Complete ( | Complete (if applicable) |  |
|-------------------|-------------|--------------------------------------|------------|--------------------------|--|
| Name (Print/Type) | Atsushi Tai | Registration No.<br>(Attorney/Agent) | Telephone  | +81 3 5993 6816          |  |
| Signature         | Atsushi Tai |                                      | Date       | 12/25/2001               |  |

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